Product Evaluation

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: RC-568

Effective Date: January 1, 2018
Re-evaluation Date: January 2022

Product Name: Polyglass Liquid Applied Roofing Systems

Manufacturer:

Polyglass USA, Inc.
1231 American Superior Drive
Winter Haven, FL 33380
(866) 802-8017

Polyglass USA, Inc.
150 Lyon Drive
Fernley, NV 89408
(800) 222-9782

Polyglass USA, Inc.
555 Oak Ridge Road
Humbolt Industrial Park (SW)
Hazleton, PA 18201
(800) 894-4563

Polyglass USA, Inc.
1111 W. Newport Center Drive
Deerfield Beach, FL 33442
(954) 233-1230

KM Coatings Manufacturing, Inc.
1719 W. Buchanan Street
Phoenix, AZ 85007
(602) 253-1168

General Description:

- **PG 800** is an asphalt-based, clay emulsion used as a base coat.
- **Polyglass Polyester Fabric Mat** is a light weight, high performance polyester fabric designed for use in reinforcement seam.
- **Polybrite 70** is a premium-grade bright white or tinted, water-based elastomeric roof coating.
- **Polybrite 76** is a premium base coat specifically designed to serve as a stain-blocking coating.
- **XtraFlex 70** is a premium-grade bright white or tinted, water-based elastomeric roof coating.
- **XtraFlex 76** is a premium base coat specifically designed to serve as a stain-blocking coating.
- **XtraFlex 80** is an asphalt-based, clay emulsion protective roof coating.

- **KM Polyester Fabric** is a light weight, high performance polyester fabric designed for use in reinforcement seam.
- **KM Acryl 15** is a premium-grade bright white or tinted, water-based elastomeric roof coating.
- **KM Acryl 30** is a premium base coat specifically designed to serve as a stain-blocking coating.

Limitations and Installation:
General installation Requirements:
All IRC and the IBC requirements must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

Application Conditions: Roof decks, in which this product is to be installed upon, must be provided with positive drainage. A minimum roof slope after construction of 1/4" per foot is recommended.

Polyglass liquid applied roofing systems must not be applied if the ambient temperature is expected to fall below 40 degrees Fahrenheit during installation or if rain is expected before the application has time to cure.

Roof Framing: Roof framing members must be in accordance with either the International Residential Code or the International Building Code.

Roof Deck Attachment: The roof deck must be secured to the roof framing to resist the required wind uplift pressures.

The following notes apply to the systems outlined herein:

1. Unless otherwise noted, insulation adhesive application rates are as follows. Ribbon or bead width is at the time of application; the ribbons/beads must expand as noted in the manufacturer's published instructions.
    A. OMG OlyBond 500 in continuous 3/4" to 1" wide ribbons, 12" o.c. (PaceCart or SpotShot). Note: OlyBond Green may be used where OlyBond 500 is referenced.
    B. Dow Insta Stik Quik Set Insulation Adhesive in continuous 3/4" to 1" wide ribbons, 12" o.c.
    C. Note: When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, adhesive ribbons must be staggered from layer-to-layer a distance of one-half the ribbon spacing.
    D. Note: The maximum edge distance from the adhesive ribbon to the edge of the insulation board must be not less than one-half the specified ribbons spacing.
2. Unless otherwise noted, all insulations are flat stock or taper board of the minimum thickness noted within this evaluation report.
3. For maintenance applications, a maintenance coating is used to only enhance the coatings ability to deliver efficient and long term performance through the protection of the underlying roof system and in this particular use does not become a roof system itself.
    A. For existing asphaltic Built-Up Roofing apply a base coat of PG 800 or XtraFlex 80 at a rate of 4 gal./sq. by brush of spray to achieve a relatively smooth surface, depending on the coarseness of the gravel. Allow to thoroughly dry before application of additional foundation, intermediate or finish coats. Polyglass Polyester Fabric Mat or KM Polyester Fabric is embedded and rolled into the base coat while still wet to ensure adhesion, with 3-inch laps. Apply an intermediate coat of Polybrite 70, KM Acryl 15, Polybrite 76 or KM Acryl 30 at a rate of 2 gal./sq. Apply a top coat of Polybrite 70, KM Acryl 15 or XtraFlex 70 at a rate of 2 gal./sq.

B. For existing asphaltic Built-Up Roofing or granule-surfaced modified bitumen apply a base coat of KM Acryl 15, KM Acryl 30, Polybrite 70, Polybrite 76, XtraFlex 70 or XtraFlex 76 at a rate of 2 gal./sq. by brush or spray to achieve a relatively smooth surface, depending on the coarseness of the gravel. Allow to thoroughly dry before application of additional foundation, intermediate or finish coats. Polyglass Polyester Fabric Mat or KM Polyester Fabric is embedded and rolled into the base coat while still wet to ensure adhesion, with 3-inch laps. Apply an intermediate coat of Polybrite 70, KM Acryl 15 or XtraFlex 70 at a rate of 2 gal./sq., to encapsulate the fabric and allow to dry. Apply a top coat of Polybrite 70, KM Acryl 15 or XtraFlex 70 at a rate of 1 gal./sq.

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

Limitations and Installation: Installation must be in accordance with the following assemblies:

TABLE 1: POLYGLASS LIQUID APPLIED ROOFING SYSTEMS – NEW CONSTRUCTION CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER					
Assembly No.	**Substrate**	**Roof Cover**			
		Base Coat	**Fabric**	**Intermediate Coat**	**Top Coat**
#1 (C-1)	Structural Concrete	KM Acryl 15, KM Acryl 30, Polybrite 70, Polybrite 76, XtraFlex 70 or XtraFlex 76 is applied at a rate of 2 gal./sq.	Polyglass Polyester Fabric Mat or KM Polyester Fabric is embedded and rolled into the base coat while still wet to ensure adhesion, 3-inch laps.	KM Acryl 15, Polybrite 70 or XtraFlex 70 is applied at a rate of 2 gal./sq., to encapsulate the fabric and allow to dry.	KM Acryl 15, Polybrite 70 or XtraFlex 70 is applied at a rate of 1 gal./sq.
Design Pressure (psf)		**Insulation Attachment**			
-495.0		N/A			

TABLE 2: POLYGLASS LIQUID APPLIED ROOFING SYSTEMS – NEW CONSTRUCTION STEEL DECK, INSULATED, MECHANICALLY ATTACHED BASE INSULATION LAYER, BONDED TOP INSULATION LAYER, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Base Insulation Layer**	**Attach**	**Top Insulation Layer**	**Roof Cover**			
					Base Coat	**Fabric**	**Intermediate Coat**	**Top Coat**
#2 (S-1)	Min. 22 ga., Type B, Grade 33 Steel	Min. 1.5” ACFoam-II, Polytherm (Flat or Tapered), Polytherm a, Polytherm G (Flat or Tapered), XtraFlex Polyiso, XtraFlex Polyiso G (Flat or Tapered)	Dekfast (DF-#12-PH3, DF-#14-PH3, DF-#15-PH3) with Dekfast PLT-H-2-7/8 plates, Polygrip Fasteners (#12, #14, #15) with Polygrip Hex Plates or Trufast #12 DP Fasteners, Trufast #14 HD Fasteners with Trufast 3” Metal Insulation Plates or Trufast 3” Recessed Metal Insulation Plates	Min. 1/2” DensDeck Prime adhered with OlyBond 500 Adhesive (PaceCart or SpotShot) in 3/4” to 1” wide ribbons spaced 12” o.c.	KM Acryl 15, KM Acryl 30, Polybrite 70, Polybrite 76, XtraFlex 70 or XtraFlex 76 is applied at a rate of 2 gal./sq.	Polyglass Polyester Fabric Mat or KM Polyester Fabric is embedded and rolled into the base coat while still wet to ensure adhesion, 3-inch laps.	KM Acryl 15, Polybrite 70 or XtraFlex 70 is applied at a rate of 2 gal./sq., to encapsulate the fabric and allow to dry.	KM Acryl 15, Polybrite 70 or XtraFlex 70 is applied at a rate of 1 gal./sq.
Design Pressure (psf)		**Base Insulation Attachment**						
		Density (ft2 / fastener)		**Parts per 4 x 4' board**			**Parts per 4 x 8' board**	
-60.0		1.8		9			18	

Limitations and Installation: Installation must be in accordance with the following assemblies:

TABLE 2 (CONTINUED): POLYGLASS LIQUID APPLIED ROOFING SYSTEMS – NEW CONSTRUCTION STEEL DECK, INSULATED, MECHANICALLY ATTACHED BASE INSULATION LAYER, BONDED TOP INSULATION LAYER, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Base Insulation Layer**	**Attach**	**Top Insulation Layer**	**Roof Cover**			
					Base Coat	**Fabric**	**Intermediate Coat**	**Top Coat**
#3 (S-2)	Min. 22 ga., Type B, Grade 33 Steel	Min. 1.5" ACFoam-II, Polytherm (Flat or Tapered), Polytherm a or XtraFlex Polyiso	Dekfast (DF-#12-PH3, DF-#14-PH3, DF-#15-PH3) with Dekfast PLT-H-2-7/8 plates, Polygrip Fasteners (#12, #14, #15) with Polygrip Hex Plates or Trufast #12 DP Fasteners, Trufast #14 HD Fasteners with Trufast 3" Metal Insulation Plates or Trufast 3" Recessed Metal Insulation Plates	Min. 1/2" DensDeck Prime adhered with Insta-Stik Roofing Adhesive in 3/4" to 1" wide ribbons spaced 12" o.c.	KM Acryl 15, KM Acryl 30, Polybrite 70, Polybrite 76, XtraFlex 70 or XtraFlex 76 is applied at a rate of 2 gal./sq.	Polyglass Polyester Fabric Mat or KM Polyester Fabric is embedded and rolled into the base coat while still wet to ensure adhesion, 3-inch laps.	KM Acryl 15, Polybrite 70 or XtraFlex 70 is applied at a rate of 2 gal./sq., to encapsulate the fabric and allow to dry.	KM Acryl 15, Polybrite 70 or XtraFlex 70 is applied at a rate of 1 gal./sq.

Design Pressure (psf)	**Top Insulation Attachment**		
	Density (ft2 / fastener)	**Parts per 4 x 4' board**	**Parts per 4 x 8' board**
-60.0	1.8	9	18

Limitations and Installation: Installation must be in accordance with the following assemblies:

TABLE 2 (CONTINUED): POLYGLASS LIQUID APPLIED ROOFING SYSTEMS – NEW CONSTRUCTION STEEL DECK, INSULATED, MECHANICALLY ATTACHED BASE INSULATION LAYER, BONDED TOP INSULATION LAYER, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Base Insulation Layer**	**Attach**	**Top Insulation Layer**	**Roof Cover**			
					Base Coat	**Fabric**	**Intermediate Coat**	**Top Coat**
#4 (S-3)	Min. 22 ga., Type B, Grade 33 Steel	Min. 1.5" ACFoam-II, Polytherm (Flat or Tapered), Polytherm a, Polytherm G (Flat or Tapered), XtraFlex Polyiso, XtraFlex Polyiso G (Flat or Tapered), loose-laid	Dekfast (DF-#12-PH3, DF-#14-PH3, DF-#15-PH3) with Dekfast PLT-H-2-7/8 plates, Polygrip Fasteners (#12, #14, #15) with Polygrip Hex Plates or Trufast #12 DP Fasteners, Trufast #14 HD Fasteners with Trufast 3" Metal Insulation Plates or Trufast 3" Recessed Metal Insulation Plates	Min. 1/2" SECUROCK Gypsum-Fiber Roof Board adhered with OlyBond 500 Adhesive (PaceCart or SpotShot) or Insta Stik Quik Set Insulation Adhesive in 3/4" to 1" wide ribbons spaced 12" o.c.	KM Acryl 15, KM Acryl 30, Polybrite 70, Polybrite 76, XtraFlex 70 or XtraFlex 76 is applied at a rate of 2 gal./sq.	Polyglass Polyester Fabric Mat or KM Polyester Fabric is embedded and rolled into the base coat while still wet to ensure adhesion, 3-inch laps.	KM Acryl 15, Polybrite 70 or XtraFlex 70 is applied at a rate of 2 gal./sq., to encapsulate the fabric and allow to dry.	KM Acryl 15, Polybrite 70 or XtraFlex 70 is applied at a rate of 1 gal./sq.

Design Pressure (psf)	**Top Insulation Attachment**		
	Density (ft2 / fastener)	**Parts per 4 x 4' board**	**Parts per 4 x 8' board**
-60.0	1.8	9	18

Limitations and Installation: Installation must be in accordance with the following assemblies:

TABLE 3: POLYGLASS LIQUID APPLIED ROOFING SYSTEMS – NEW CONSTRUCTION STEEL DECK, INSULATED, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Base Insulation Layer**	**Top Insulation Layer**	**Attach**	**Roof Cover**			
					Base Coat	**Fabric**	**Intermediate Coat**	**Top Coat**
#5 (S-4)	Min. 22 ga., Type B, Grade 33 Steel	Min. 1.5" ACFoam-II, Polytherm (Flat or Tapered), Polytherm a, Polytherm G (Flat or Tapered), XtraFlex Polyiso, XtraFlex Polyiso G (Flat or Tapered), loose-laid	Min. 1/2" SECUROCK Gypsum-Fiber Roof Board	Trufast #12 DP Fasteners, Trufast #14 HD Fasteners with Trufast 3" Metal Insulation Plates	KM Acryl 15, KM Acryl 30, Polybrite 70, Polybrite 76, XtraFlex 70 or XtraFlex 76 is applied at a rate of 2 gal./sq.	Polyglass Polyester Fabric Mat or KM Polyester Fabric is embedded and rolled into the base coat while still wet to ensure adhesion, 3-inch laps.	KM Acryl 15, Polybrite 70 or XtraFlex 70 is applied at a rate of 2 gal./sq., to encapsulate the fabric and allow to dry.	KM Acryl 15, Polybrite 70 or XtraFlex 70 is applied at a rate of 1 gal./sq.

Design Pressure (psf)	**Top Insulation Attachment**		
	Density (ft2 / fastener)	**Parts per 4 x 4' board**	**Parts per 4 x 8' board**
-75.0	2.0	8	16

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.